

REMARKS

Claims 1, 2, and 4 - 7 stand rejected in the Office Action. Claims 1, 2, and 4 - 7 have been cancelled, and new claims 12 - 14 have been added. Upon entry of the amendment, claims 12 - 14 remain pending in the application. Claims 3, and 8 - 11 remain withdrawn from consideration.

Support for the amended claims is found in the specification and claims as originally filed. For example, claim 12 incorporates subject matter of former claims 1, 2, 4, and 5. Claim 13 corresponds to cancelled claim 6, and claim 14 corresponds to cancelled claim 7. Applicants respectfully request entry of the amendment.

Rejection Over the Nagaoka Japanese Patents

Claims 1, 2, and 4 - 7 stand rejected under 35 U.S.C. § 102(b) as anticipated by any one of Japanese patents 9-95851, 9-95849, or 9-95850 (the Nagaoka patents). Applicants respectfully traverse the rejection as to the amended claims and request reconsideration.

Applicants respectfully submit that the Nagaoka patents do not inherently disclose the characteristics of the amended claims, as discussed below. Alternatively, if the subject matter of the claims is inherently disclosed in the Nagaoka patents, Applicants are entitled to rely on the filing date of the Nagaoka patents and the Nagaoka patents are removed as prior art.

The claims recite filaments of a biodegradable polymer. The biodegradable polymer is a polylactic acid or a copolymer of D-lactic acid and L-lactic acid in which the copolymerization ratio of one of D-lactic acid and L-lactic acid is 90% or more and that of

the other is 10% or less. The filaments have a supercool index of 0.3 - 0.6, a birefringence of 3×10^{-3} - 15×10^{-3} and a polymer crystalline size of 15 to 20 Å as measured axially. In order to set the polymer supercool index, the birefringence, and the polymer crystalline size to be in the respective ranges, the spun filaments need to be drafted at a drafting speed of 1000 - 2500 meters per minute (page 18, lines 10 - 32).

The Nagaoka patents are not limited in their disclosure to the above polymers. Furthermore, as the Office Action indicates, the Nagaoka patents provide no example of fibers drawn at a drafting speed of from 1000 - 2500 meters per minute. Rather, the Nagaoka patents disclose specific embodiments such as 800 meters per minute, 3500 meters per minute, 4500 meters per minute, and 6500 meters per minute. The Nagaoka patents do not specifically mention that the spun filaments need to be drafted at a speed of 1000 - 2500 meters per minute in order to set the supercool index, the birefringence, and the polymer crystalline size of the fibers. Because the Nagaoka patents disclose embodiments having drafting speeds outside the range necessary to produce fibers with properties as recited in the claims, one of skill in the art would not expect that filaments produced according to the processes of the Nagaoka patents would inherently have the properties recited in the claims. For these reasons, Applicants believe the amended claims are patentable over the Nagaoka patents, and respectfully request that the rejection be withdrawn.

Alternatively, the claims stand rejected under § 103 as obvious in light of the Nagaoka patents. Applicants respectfully traverse the rejection as applied to the amended claims and request reconsideration.

As noted above, the Nagaoka patents do not disclose processes for making fibers by drafting at a speed from 1000 - 2500 meters per minute in order to obtain filaments having property as recited in the claims. The application states ...

It is important to adjust the drafting speed at 1000 - 2500 meters per minute as previously described. ... the supercool index birefringence and crystalline size of the polymer can be accommodated within the aforesaid ranges by adjust the drafting speed within the aforesaid range.

Page 18, lines 10 - 32. The Nagaoka patents provide no motivation to select such a range of drafting speed in order to achieve the properties recited in the claims. For this reason, Applicants respectfully submit that it would not have been obvious to modify the disclosure of the Nagaoka patent to arrive at the subject matter of the claims.

Because the Nagaoka patents do not inherently disclose filaments having the properties recited in the claims, and because in the alternative the Nagaoka patents provide no motivation to modify its disclosure to arrive at the subject matter of the claims, Applicants respectfully request that the rejection of the claims under § 102(b) or alternatively under § 103 over the Nagaoka patents be withdrawn.

The current application is a continuation-in-part claiming foreign priority to the Nagaoka patents. Applicants respectfully urge that the amended claims are patentable over the Nagaoka patents for the reasons discussed above. Applicants believe they have met their burden to show that the subject matter of the claims is not inherently disclosed in the Nagaoka patents. As discussed below, if the Nagaoka patents inherently disclose the subject matter of the claims, they are removed as prior art by virtue of a claim to form priority.

An application is entitled to claim priority to an earlier application if no new matter has been added. For a continuation-in-part application (CIP) claiming priority to a foreign document, Applicants are entitled to rely on the filing date of the foreign priority document for subject matter that is adequately disclosed in the priority documents.

MPEP 2163.07(a) states (emphasis added)

By disclosing in a patent application, a device that inherently performs a function or has a property... a patent application necessarily discloses that function The application may later be amended to recite the function... without introducing prohibited new matter.

Thus, if a priority document inherently discloses a property, it is not new matter in the application to recite explicitly what was implicit in the priority document.

Applying the above rules, it follows that if the Nagaoka patents inherently disclose the polymer compositions and properties recited in the amended claims, the application is entitled to rely on the priority document for its filing date. In such a case, the priority document would be removed as prior art under § 102(b). For this additional reason, Applicants believe that the amended claims are patentable over the Nagaoka patents and respectfully request that the rejection be withdrawn.

Rejection Over EP 765959

Claims 1, 2, and 4 - 7 stand rejected under 35 U.S.C. § 102(b) and alternatively under 35 U.S.C. § 103 as obvious over Nagaoka et al., EP 765959 (EP '959). Applicants respectfully traverse the rejection as applied to the amended claims and request reconsideration.

Amended claim 13 contains the limitation that the polymers are homopolymers of L-lactic acid homopolymers of D-lactic acid, or copolymers of D-lactic acid and L-lactic acid in which the copolymerization molar ratio of either one of D-lactic acid and L-lactic acid is 90% or more and the molar ratio of the other is 10% or less. Mixtures of the above biodegradable polymers are allowed in the filaments, but other combinations of polymers are excluded by the terms of the claims. EP '959 does not disclose nonwoven fabrics made of filaments of biodegradable polymers as recited in the claims. For example, it recites a copolymer of L-lactic acid and hydroxycaproic acid (Example 31), or a copolymer of L-lactic acid and glycolic acid (Examples 32 and 33). In Example 23, EP '959 recites a copolymer of L-lactic acid and D-lactic acid having a copolymerization ratio of 80/20. Example 20 recites a 90:10 copolymer of L-lactic acid with D-lactic acid, but it is in a blend with a 80:20 copolymer of L-lactic acid with hydroxy capronic acid. Thus, EP '959 does not disclose or suggest the biodegradable polymers as recited in the current claims. Furthermore, as discussed above, with respect to the Nagaoka patents, EP '959 does not teach or suggest that filaments of a biodegradable polymer having properties such as recited in the claims can be obtained for example, by using drafting speeds of 1000 - 2500 meters per minute. Accordingly, Applicants respectfully request the rejections under § 102 and § 103 be withdrawn.

If EP '959 is nevertheless found to inherently disclose some of the subject matter of the claims, then Applicants respectfully submit that EP '959 is removed as prior art for the same reasons as discussed above with respect to the Nagaoka patents. For this further reason, Applicants believe that the amended claims are patentable over EP '959, and respectfully request that the rejections be withdrawn.

Rejection Over FR 27257321

Claims 1, 2, and 4 - 7 stand rejected under 35 U.S.C. § 102(b) or in the alternative under 35 U.S.C. § 103(a) as obvious over Philippe et al. French Patent No. 2,725,731 (FR '731). Applicants respectfully traverse the rejection as to the amended claims, and request reconsideration.

As a preliminary matter, if the subject matter of the claims is inherently disclosed in the Nagaoka patents as discussed above, Applicants are entitled to a priority date based on a claim of priority under 35 U.S.C. § 119 to the Nagaoka patents. If such is the case, the current application is entitled to an earlier effective filing date than the publication date of FR '731, and FR '731 is therefore not prior art under 35 U.S.C. § 102(b). Accordingly, Applicants respectfully request that the rejections under § 102(b) as well as § 103 be withdrawn.

Even if the current application is not entitled to an earlier filing date than the publication date of FR '731, Applicants respectfully submit that FR '731 does not disclose or suggest the subject matter of the amended claims. The Office Action states that FR '731 discloses extruding polylactic acid at 15 - 30 meters per second (900-1800 meters per minute). Applicants respectfully submit that the 900 - 1800 meters per minute speed does not refer to extruding or drafting the polylactic acid, but rather refers to the speed of a belt 4 on which a finished web 15 is placed. Such a speed is different from a drafting speed as recited in the present invention. A drafting speed refers to the speed of drawing the spun filaments from the spinneret and has nothing to do with the speed of a belt on which the finished web is placed. Applicants respectfully submit that properly understood,

FR '731 does not anticipate or make obvious the current claims. For this reason, as well as the reasons discussed above, Applicants respectfully request that the rejection be withdrawn.

Rejection Over Kahn et al.

Claims 1, 2, and 4 - 6 stand rejected under 35 U.S.C. § 102(b) or alternatively under 35 U.S.C. § 103(a) over Khan et al. Applicants respectfully traverse the rejection as to the amended claims and request reconsideration.

The amended claims recite a thermoformable nonwoven fabric composed of filaments of a biodegradable polymer selected from the group consisting of poly D-lactic acid, poly L-lactic acid, copolymers of D-lactic acid, and L-lactic acid, and mixtures of those biodegradable polymers, in which the copolymerization molar ratio of one of L-lactic or D-lactic acid is 90% or more and that of the other is 10% or less. Khan et al. discloses only the process of obtaining by spun bonding, a polylactic acid web, and does not teach or suggest the nonwoven fabric of the claims. For this reason, Applicants respectfully request that the rejection over Khan et al. be withdrawn.

CONCLUSIONS

For the reasons discussed above, Applicants believe that amended claims 12 - 14 are in an allowable condition and respectfully request an early notice of such allowance. The Examiner is invited to telephone the undersigned if that would be helpful to resolving any matter.

Respectfully submitted

Dated: June 1, 2001

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